

REMARKS

Favorable reconsideration of the subject application is respectfully requested in view of the comments below.

Claims 1, 5, 7 and 14 are pending in the subject application.

I. Rejection of Claims 1 and 5 Under 35 U.S.C. § 112, First Paragraph

Claims 1 and 5 are rejected under 35 U.S.C. § 112, first paragraph. The Examiner states that the specification is enabling for use of allopurinol and carprofen, but does not provide sufficient support for the use of xanthine oxidase inhibitors generically. The Examiner states that the claims are interpreted broadly because they include the transitional word “comprising,” which includes active ingredients in addition to xanthine oxidase. The Examiner states that the claims are generic in their inclusion of the class of compounds, xanthine oxidase inhibitors, while the specification specifically provides working examples of allopurinol. The examiner concludes, therefore, that the specification does not provide an enabling disclosure of the claimed invention.

Applicant respectfully disagrees with the Examiner’s conclusion.

The claims are broad, but no broader than the specification. For example, the specification specifically teaches that the xanthine oxidase inhibitor of the claimed compositions and methods may be used in combination with other active components, several of which are listed throughout the specification. For example, it is taught that the xanthine oxidase inhibitor may be used in combination with a uricosuric agent, supplements of the uricase protein and urate channel inhibitors. Thus, contrary to the Examiner’s assertions, the specification does provide disclosure of the use of xanthine oxidase inhibitors with other active components.

The Examiner also asserts that the specification does not enable use of xanthine oxidase inhibitors generically, and is limited to allopurinol and/or carprofen. However, throughout the specification allopurinol is referred to as an *example* of an xanthine oxidase inhibitor, *i.e.*, one compound included in the class of compounds known in the art as xanthine oxidase inhibitors. This class of compounds is well known in the art, as evidenced by the six patents (US 3,965,518; US 4,021,556; US 305,942; US 4,495,195; and 6,589,573) enclosed herewith. These prior art patent demonstrate that xanthine oxidase inhibitors are a well established class of compounds and that methods for identifying xanthine oxidase inhibitors are well known. It is not necessary that the present specification teach that which is well known in the art. The present specification discloses an activity and use of xanthine oxidase activities that was unknown in the prior art, and demonstrates that activity and use by example.

The test of enablement is whether one of ordinary skill in the art could make or use the invention based on the disclosure in the specification coupled with information known in the art without undue experimentation, not the number of working examples provided in the specification. Further, it is well established law that a patent need not teach and preferably omits that which is well known in the art. *In re Buchner*, 929 F2d. 660, 661 (Fed. Cir. 1991). As discussed above, it is well established in the art that allopurinol is a member of a group of compounds known as xanthine oxidase inhibitors and methods of identifying such compounds are well known. The specification teaches that xanthine oxidase inhibitors are useful therapeutic agents in the treatment and prevention of hypertension and demonstrates this effect by example. Thus, on the basis of the guidance provided in the specification coupled to knowledge of well established art, the skilled practitioner is able to make and use the claimed invention without undue experimentation.

The specification provides a working example of the claimed invention; the level of skill in the art is high; and the level of unpredictability in this field is low given that the activity of this class of compounds is well established in the art. The amount of experimentation needed to make or use the invention based on the specification and knowledge of the skilled practitioner clearly is not undue. As such, the Examiner's conclusion of lack of enablement is unfounded. Accordingly, the rejection of claims 1 and 5 under 35 U.S.C. § 112, first paragraph is respectfully traversed.

II. Rejection of Claims 1, 5, 7 and 14 Under 35 U.S.C. § 103(a)

Claims 1, 5, 7 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentably obvious over Mentrup *et al.* The Examiner states that it would have been obvious to one of skill in the art at the time of the invention that allopurinol is an active agent in the treatment of hypertension. The Examiner asserts that the claimed invention amounts to more than discovery of a new property of allopurinol.

This rejection is respectfully traversed as follows.

Claim 1 is directed to a method of treating hypertension comprising administering a therapeutically effective amount of an agent or pharmaceutically acceptable salt thereof which is capable of reducing uric acid levels in a patient in need of such treatment. As indicated in claim 7, allopurinol is an active agent suitable for this purpose. Applicant submits, however, that the Mentrup *et al.* reference neither teaches nor suggests the invention claimed in claims 1, 2, 5 and 7.

Mentrup *et al.* disclose piperidine compounds which are indicated as active as vasodilators and hypotensives. The patent discloses in column 8 that the piperidine compounds of the patent have a long lasting hypotensive effective. In column 9, the patentee discloses that

the piperidine compounds of the patent can be combined with one or more other pharmaceutical substances such as substances having a cardiac/circulatory effect or a hypotensive effect. There are also mentioned diuretics, beta blockers, vasodilators, sympathicolitics and converting enzyme blockers. Thereafter follows a table which lists 34 separate materials which are apparently suitable for combination with the piperidine compounds of this patent. One material listed is allopurinol, but there is no indication in this table as to the therapeutic effect of the particular substances listed or amount of allopurinol required to achieve a desired therapeutic effect.

It is also brought to the Examiner's attention that Mentrup *et al.* does not teach combinations of its piperidine hypotensive compounds, but teaches only their use as solo active ingredients or the combination of a hypotension piperidine compound and another therapeutic compound, such as one of those listed in the table in column 9.

In the Official Action, the Examiner suggests that Mentrup *et al.* disclose the use of allopurinol as being known to treat hypertension. Applicant submits that this conclusion is not supported by Mentrup *et al.* In fact, to Applicant's knowledge, allopurinol is not known to treat hypertension and certainly is not disclosed in column 9 of Mentrup *et al.* as being a material useful to treat hypertension. Further, as shown in the copy of *Merck Index*, 13th Edition, 2001, pages 52 and 53 (of record), allopurinol is known for the treatment of hyperuricemia and for the treatment of chronic gout. Therefore, the Merck Index is evidence which rebuts the Examiner's presumption that allopurinol is known to treat hypertension and is included in Mentrup's list of other active agents as a hypertensive treatment.

Applicants submit that what Mentrup *et al.* teach in column 9 is that the hypotensive agents of his patent can be used with other therapeutic agents which can be hypotensive but can

also have therapeutic activity other than as hypotensives. Applicant submits that the teaching from the Merck Index presented herewith rebuts any presumption that allopurinol is known to be a hypertensive agent and rebuts the assumption made that the reference provides motivation to one of ordinary skill to use allopurinol or any other xanthine oxidase inhibitor as a hypotensive agent. In fact, since the Merck Index discloses that allopurinol is known for the treatment of hyperuricemia, a condition in which a patient's circulating blood contains elevated levels of uric acid, allopurinol falls within the substances which have a cardiac/circulatory effect as described by Mentrup et al. at column 9, line 10. This is further evidence that allopurinol is not disclosed or suggested by Mentrup et al. as a hypertensive agent.

For these reasons, it is submitted that the reference relied on by the Examiner neither teaches nor suggests the invention claimed in claims 1, 2, 5 and 7 and the rejection should be withdrawn.

III. Rejection of Claims 1, 5, 7 and 14 Under 35 U.S.C. § 102(b)

Claims 1, 5, 7 and 14 are rejected under 35 U.S.C. § 102(b) as being anticipated by Mentrup *et al.* The Examiner asserts administration of a compound disclosed by Mentrup *et al.* having the combination of allopurinol with an active agent for treating hypertension in Mentrup et al. would inherently prevent the claimed disorder.

Applicant respectfully disagrees with the Examiner's conclusion.

As discussed above, Mentrup *et al.* does not disclose use of allopurinol for treating or preventing hypertension, alone or in combination with another agent. Instead, Mentrup *et al.* teach the use of allopurinol with a hypotension agent, for an unspecified effect, but based on what was known of the activity of allopurinol (See Merck Index, of record), it was included in Mentrup *et al.*'s composition for "cardiac/circulatory effect." No dosage of allopurinol for

achieving this cardiac/circulatory effect or *any* therapeutic effect is provided. Thus, Mentrup *et al.* does not teach administration of a therapeutically effective amount of allopurinol to treat or prevent hypertension. Further, no guidance is provided in Mentrup *et al.* for achieving this effect. Thus, contrary to the Examiner's assertions, addition of an unspecified amount of allopurinol to Mentrup *et al.*'s hypotensive composition does not inherently prevent hypertension.

Moreover, Mentrup *et al.* merely teaches treatment of hypertension and does not teach **prevention**. Thus, the Examiner's assertions that administration of a hypotensive compound for the treatment of hypertension, as taught by Mentrup *et al.* inherently prevents hypertension is unfounded. One cannot prevent a disorder that is already being treated.

In conclusion, Mentrup *et al.* does not teach the use of allopurinol to treat or prevent hypertension, but merely includes an unspecified amount of allopurinol in its hypotensive compositions for the treatment of "cardiac/circulatory effects." Use of allopurinol in this manner does not inherently anticipate the present invention, nor does the disclosure of an unspecified amount of allopurinol in a hypotensive composition anticipate the present invention.

Accordingly, the rejection of claims 1, 5, 7 and 14 under 35 U.S.C. § 102(b) over mentrup *et al.* is respectfully traversed.

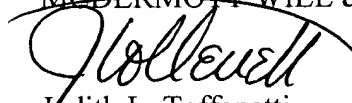
It is believed that the above-represents a complete response to the Official Action and serves to place this application in condition for allowance.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "J. Toffenetti", written over the printed name.

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